

### REMARKS

This Amendment is being filed with a Request for Continued Examination (RCE) under 37 CFR 1.114.

Claim 1 has been amended to incorporate the limitations recited in Claims 2, 3 and 24. Claims 2, 3 and 24 are canceled accordingly.

In the Advisory Action, the Examiner maintained and reiterated the rejections of Claims 1-24 over the cited references, including Verall *et al.*, Mortazavi *et al.* and Woodgate *et al.* In particular, the Examiner argued that Woodgate *et al.* teach an "internal polarizer (Ref. 66 in FIG. 25) having all the same characteristics of that which is found in the claimed invention, namely that is above an electrode (63), directly laminated FIG. 25). Applicant respectfully traverses the rejections.

In FIG. 25 of Woodgate *et al.*, no direct contact exist between the internal polarizer (66) and the electrode (63). Actually, a color filter (64) and a substrate (103) are inserted between the internal polarizer (66) and the electrode (63). Instant Claim 1, as amended, calls for a liquid crystal display comprising a front panel, a rear panel, and a liquid crystal layer placed between two said panels, wherein at least one of the front and rear panels comprises an internal polarizer situated between an electrode and a front or rear surface of a substrate in the panel, and said internal polarizer is made of a material chemically stable at an elevated temperature of at least 150°C, and said internal polarizer is made of an optically anisotropic dichroic crystal film that comprises rodlike supramolecules comprising at least one disc-shaped polycyclic organic compound with conjugated  $\pi$ -system, and said film being characterized by an intermolecular spacing of  $3.4 \pm 0.3$  Å along its polarization axis, and said optically anisotropic dichroic film is formed from a lyotropic liquid crystal containing at least one dichroic dye, and said internal polarizer and electrode are directly laminated.

The Examiner had argued that Verrall *et al.* disclose a liquid crystal device 10 and identifies element 18 as a front panel, element 15 as a rear panel, element 16 as a liquid crystal layer, and element 17 as an internal polarizer. Applicant respectfully disagrees. Element 18 in FIG. 1 of Verall *et al.* is a liquid crystal cell rather than a front

panel as asserted by the Examiner. All the polarizers, including the first and second polarizers 17 and 19, and the reflective polarizer 14, are outside the liquid crystal cell 18. Verrall does not teach any internal polarizer. Verrall *et al.* do not teach or suggest throughout their disclosure any polarizer that is included inside of a substrate of a liquid crystal substrate.

Examiner had also argued that Mortazavi *et al.* disclose a polarizer made of an optically anisotropic dichroic crystal film comprising a rodlike supramolecules formed from a lyotropic LC containing at least one dichroic dye that is chemically stable at an elevated temperature of at least 150 °C. Applicant respectfully submits that the Examiner's reading of Martazavi *et al.* is incorrect in two aspects. First, the polarizer film of Martazavi *et al.* is made of a blend of (a) a wholly aromatic thermotropic liquid crystalline polymer and (b) an organic dichroic dye compatible with the polymer. Thus, Martazavi *et al.* do not teach an optically anisotropic dichroic film formed from a lyotropic liquid crystal as recited in instant Claim 1. Second, the temperature referred to in Martazavi *et al.* is one at which the organic dichroic dye is "compatible" with the thermotropic liquid crystalline polymer, *i.e.*, at which the organic dichroic dye and the polymer are suitable to be blended. In contrast, the temperature recited in instant Claim 1 refers to one at which the material forming the internal polarizer is still chemically stable. The internal polarizer recited in instant Claim 1 is stable at the temperature of its formation.

There is no teaching or suggestion in any of the cited art that would have motivated one of ordinary skill in the art to combine the cited references. Even if one of ordinary skill attempted to combine the cited references at the time the invention was made, the combination cannot arrive at the invention recited in Claim 1, because Verrall *et al.* do not teach or suggest an internal polarizer, Woodgate *et al.* do not teach an internal polarizer made of a material chemically stable at an elevated temperature of at least 150°C, and Martazavi *et al.* do not compensate the deficiencies of Verrall *et al.* and Woodgate *et al.*

Accordingly, reconsideration of the rejections of Claim 1 under 35 U.S.C. 103(a) over Verall *et al.* in view of Mortazavi *et al.* and further in view of Woodgate *et al.* is respectfully requested. Claims 2-24 depend on Claim 1. They are therefore allowable for at least the same reasons as for Claim 1.

Based on the above, Applicant respectfully submits that the application is in condition for allowance and a Notice of Allowance is respectfully requested. If any matters can be resolved by telephone, the Examiner is invited to call the undersigned attorney at the telephone number listed below. No fees beyond those being submitted concurrently herewith are believed due. The Commissioner is authorized to charge any additional fees to Deposit Account No. 50-2319 (Order No. A-72209/MSS/TJH (477077-106)).

Respectfully submitted,

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